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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,965	03/02/2004	Jathan D. Edwards	53868US05	2139

7590 10/31/2007
Attention: Eric D. Levinson
Imation Corp.
Legal Affairs
P.O. Box 64898
St. Paul, MN 55164-0898

EXAMINER

BODAWALA, DIMPLE N

ART UNIT	PAPER NUMBER
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1791

MAIL DATE	DELIVERY MODE
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10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/790,965

Applicant(s)

EDWARDS ET AL.

Examiner

Dimple N. Bodawala

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 30-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-35 and 42-46 is/are allowed.
- 6) ☒ Claim(s) 36-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Claims 30-46 are pending.

Claims 1-29 are cancelled.

In view of the amendment filed on August 24, 2007, following rejection is withdrawn as of reasons of record from the previous office action, mailed on May 25, 2007.

- Rejection of claims 42-46 under 35 U S C 103(a) as being unpatentable over Suzuki et al. (U S Patent No. 4,947,384).

In view of the amendment filed on August 24, 2007, following rejections are maintained as of reasons of record from the previous office action, mailed on May 25, 2007.

- Rejection of claims 36-39 and 41 under 35 U S C 102 (b) as being anticipated by Suzuki et al. (U S Patent No. 4,947,384).
- Rejection of claim 40 under 35 U S C 103 (a) as being unpatentable over Suzuki et al. (U S Patent No. 4,947,384).
- Allowable subject matter for claims 30-35.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 36-39 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (U S Patent No. 4,947,384).
3. Suzuki et al ('384) discloses the master stamper (See col.4 line 41) which comprises the data layer (5) on the lower side surface of the stamper; and a stamper pattern formed in the data layer (5) defined by adjacent stamper lands (3) and the stamper grooves (2) (See col.1 lines 11-16), wherein the stamper grooves (2) extend down into the stamper surface, wherein the groove (2) defines the groove bottom and the stamper land defines the stamper land top. It further teaches that the track pitch is less than 425 nanometer by providing 1.6 micro inches, which converts to 40.64 nanometer (See col.1 lines 49-67). Figure 2 teaches that the groove bottoms are flat and coplanar, while figure 3 teaches that the groove bottoms include sharp corners. It further teaches that the width of the groove bottom is 0.8 micro inches, which converts to 20.32 nanometer, which value is greater than 35 percent of the track pitch (See col.1 lines 49-67). It further teaches that the depth of the groove is one eighth of the reading laser beam wavelength, thus inherently discloses a groove depth within the claimed range based on the desired depth related to the laser beam wavelength (See col.1 lines 49-67).

4. Claim 41 of the instant application contains the method step for the production of the claimed the second-generation stamper, which is created from a first generation stamper. With regard to the claim recitations regarding the method of forming the apparatus, such relate to the method of producing the claimed apparatus, which does not impart patentability to the apparatus claims. The determination of patentability is based on the product apparatus itself, *In re Brown*, 173 USPQ 685, 688, and the patentability of a product does not depend on its method of production, *In re Pilkington*, 162 USPQ 145, 174; see also *In re Thorpe*, 227 USPQ 964 (AFC 1985). Therefore, claim 41 is anticipated by Suzuki ('384).

5. Suzuki ('384) discloses all claimed structural limitations, and, thus, the claims are anticipated.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (U S Patent No. 4,947,384).

8. Suzuki ('384) discloses all claimed structural limitations as discussed above. It further teaches that the width of the groove bottom is about 50

percent of the track pitch, however does not disclose the width of the groove greater than 50 percent of the track pitch.

9. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Suzuki ('384) by providing the width of the groove greater than 50 percent of the track pitch because such an alignment supports the preformat portion and the recording portion to decrease the read out error of the address signal and obtain a track crossing signal enlarged above a threshold value (See col. 4 lines 50-55).

Allowable Subject Matter

10. Claims 30-35 and 42-46 are allowed.

11. The following is an examiner's statement of reasons for allowance:

12. The prior art of record fails to teach or suggest a stamper for use in creating replica disk substrate as defined in the claims 30-35 and 42-46 of the instant application. The closest prior art, Suzuki et al. (U S Patent No. 4,947,384) discloses all claimed structural limitations as discussed above, however Suzuki ('384) fails to teach or suggest that the groove bottoms are wider than the land tops as recited in claim 30 of the instant application, and the stamper patterns define a track pitch less than 2 multiplied by a laser spot size associated with a laser used to perform laser etching of the master pattern of the master disk as defined in claim 42 of the instant application,

wherein the claimed limitation such as “the track pitch less than 2 multiplied by a laser spot size associated with a laser used to perform laser etching” is not method step, but a structural limitation of the media as suggested by Applicant (See remark filed on August 24, 2007).

13. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Response to Arguments

14. Applicant's arguments, see pages 5-6, filed on August 24, 2007, with respect to claims 42-46 have been fully considered and are persuasive. The Rejection of claims 42-46 has been withdrawn.

15. Applicant's arguments filed August 24, 2007 have been fully considered but they are not persuasive. Applicant argues that the prior art, Suzuki is non-enabling of the dimension required by Applicant's claims. It further argues that the mis-translated dimension of 1.6 micro inches track pitch and of 0.8 micro inch groove dimensions are not enabled. It further argues that the prior art, Suzuki does not enable any way to obtain an optical diffraction pattern from a pattern of sub-optically diffracting pitch but instead presumes

conventional tracking means which is consistent with 1.6 micro meter pitch of priority documents JP 62-90081.

16. This is not found persuasive because the rejection of claims is based on the US reference Suzuki (U S Patent No. 4,947,384), not the foreign reference, wherein U S reference discloses all claimed structural limitations as discussed above with the dimension of micro inches. Therefore, Suzuki is enabling of the dimension as required in claims 36-41 of the instant application.

17. Applicant further argues that the prior art, Suzuki discloses groove dimension appear to refer to the average width of the groove, not the width of the groove bottom.

18. This is not found persuasive because the prior art discloses a width of the groove, which inherently suggests the groove bottom. And further more, prior art suggests that the width of groove includes a shape in which the bottom of the groove has a roundish periphery (See col.2 lines 10-17).

Conclusion

19. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a

first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dimple N. Bodawala whose telephone number is (571) 272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra N. Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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